# CURRICULUM FOR EMERGENCY MANAGEMENT COURSE

## Essential Requirements:

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Criteria</th>
<th>Requirement</th>
<th>Remarks (If any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Basic eligibility of participants</td>
<td>Ayush Final year students, Interns, Ayush graduates and PG scholars</td>
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<td>2</td>
<td>Duration of the Course</td>
<td>1 Month</td>
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<td>3</td>
<td>Number of trainees per Batch</td>
<td>Min.-6 to 8 students Max.-10</td>
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<td>4</td>
<td>Trainer Qualification</td>
<td>Kayachikitsa, Shalya, MD &amp; MBBS expert with practical knowledge on curriculum aspects</td>
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<td>5</td>
<td>Number of Trainers required (Theory)</td>
<td>Min.- 4</td>
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<td>6</td>
<td>Number of Guest faculty required</td>
<td>Min.-1 Max.-2</td>
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<td>MBBS, Specialist – Emergency medicine or Incentivist</td>
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<td>7</td>
<td>Number of working Technician (Skill expert) required for practical training</td>
<td>Min.- not required</td>
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<td>8</td>
<td>Infrastructure Technical specification requirement</td>
<td>Min.-As per NCISM</td>
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<td>9</td>
<td>Assessment Method</td>
<td>Theory – 100 marks Practical – 100 Marks</td>
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1. Basic Introduction


Theory: - 2 hours
Practical: - 2 hours

2. ICU Instruments


Theory: - 2 hours
Practical: - 2 hours

3. ICU Monitors/ Ventilators.

Need of Non Invasive and invasive Ventilators, Modes of NIV/ Mechanical Ventilation, Features of Multi para Monitors. Indications and Contraindications of NIV, Loops and graphs of Mechanical Ventilation, mechanical ventilation of conditions such as ARDS, COPD, COVID-19 etc.

Theory: - 2 hours
Practical: - 2 hours

4. ICU Drugs


Theory: - 2 hours
Practical: - 2 hours

5. BLS/ACLS

Basic knowledge of CPR, CPR in Adults, CPR in Children, Neonatal Resuscitation, Resuscitation in Pregnancy, Disturbance of Cardiac Rhythm, and Conduction.

Training of BLS/ACLS.

Theory: - 2 hours
Practical: - 4 hours
6. Airway Management


Theory: - 2 hours
Practical: - 4 hours

7. Sepsis and Various Bundles.


Theory: - 2 hours
Practical: - 2 hours

8. Shock and its Management

Various types of Shock, Diagnosis, Vital Signs, Management of Septic Shock, Test to Diagnose sepsis, Emergency Management, Antibiotics, IV Fluids, Treating source of infection, other Treatment Modalities, Recent Advances.

Management of Various Types of Shock.

Theory: - 2 hours
Practical: - 2 hours

9. COVID Management

Infection prevention, control, interfacility transfer, clinical Management of Mild/Moderate/severely ill patients, special considerations for geriatric, pregnant and paediatric population, Rehabilitation ethics and palliative care, education and advice to patients and their families.

Theory: - 2 hours
Practical: - 4 hours

10. Respiratory Emergencies

Critical actions, Initial Diagnostic evaluation, Symptoms and Management of Acute Pulmonary edema, Decompensated Heart Failure, Pulmonary embolism, asthma, COPD, Pneumonia, Pulmonary Infections, Etiology Management, Prognosis, ABG Interpretation,

Theory: - 2 hours
Practical: - 2 hours
11. Cardiac Emergencies

Acute Coronary Syndrome, Stroke, Cardiac Arrhythmia, ECG Interpretation, Cardiac Arrest, Cardiogenic Shock, Syncope, Hypertensive Emergencies, Acute Heart Failure, Myocarditis, Endocarditis, Valvular Emergencies, Vascular Emergencies.

Theory:- 2 hours
Practical:- 2 hours

12. CNS Emergencies.

Anatomy Physiology, Blood Supply of Brain.

Stroke: - Causes, Different Types, Sign and Symptoms, management, Positioning of CVA attack patient during Transport, Ventilator Support, GCS Scale, AVPU scale.

Theory:- 2 hours
Practical:- 2 hours


Electric Shock, Hypothermia, Heat Stroke, Altitude illness, Drowning, Trauma, Snake Bite, Roles and Responsibilities related to personal safety, safety of crew, Patient and Bystanders, burn management.

Theory:- 2 hours
Practical:- 2 hours

14. Common Poisoning and Anti dotes

Common poisoning by Ingestion, Inhalation, Injection and Surface Absorption, Signs and Symptom of over Dose, Assessment of Suspected case of Drugs Poisoning, Alcohol, Managing a Violent Patient With Care and Patience, Implement a Treatment Plan for Patients.

Theory:- 2 hours
Practical:- 2 hours

15. Electrolyte Management and Endocrine Emergencies,

Hyponatremia, Hypernatremia, Hypo-kalemia, Hyper-kalemia, Hypo-calcemia, Hyper-calcemia, Hypo-magnesemia, Hyper-magnesemia, Hypo and Hyper glycemia, Diagnosis and Management, DKA, Thyroid Disorders.

Theory:- 2 hours
Practical:- 2 hours

16. ICU procedures.


Theory:- 3 hours Practical:- 3 hours
After completion of training there will be one Theory exams of 100 marks comprising subjective and objective questions. Questions will be related to resuscitation, clinical Diagnosis, lab Value interpretation, Emergency Drugs, Disease Management, Emergency Procedures, Transfusion Therapy, Post-Operative care and other aspect of Critical Care Medicine. Trainees need to do ICU resident duty according to roaster.

5. Practical exam of 100 marks comprising.

A. 4 Work Stations

1. ACLS/ BLS 15 marks
2. Airway Management 15 marks
3. Emergency Drugs 15 marks
4. ICU Instruments. 15 marks

B. Clinical Cases 40 marks

NOTE:

1. It is mandatory to pass separately in ACLS and Airway stations to be declared pass in Practical Examination.
2. The trainee's need to do ICU resident duty as per roaster.